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## Eaton 138446

Eaton SVX Variable frequency drive SVX 3-/3-phase 45 kW 480 V; degree of protection IP21; integrated EMC filter; coated printed circuit boards

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<b>PRODUCT NAME</b>	Eaton SVX Variable frequency drive
<b>CATALOG NUMBER</b>	138446
<b>PRODUCT LENGTH/DEPTH</b>	640 mm
<b>PRODUCT HEIGHT</b>	257 mm
<b>PRODUCT WIDTH</b>	237 mm
<b>PRODUCT WEIGHT</b>	58 kg

<b>CERTIFICATIONS</b>	CUL UL report applies to both US and Canada CSA Class No.: 3211-06 CE marking UL Category Control No.: NMMS, NMMS2, NMMS7, NMMS8 UL Listed IEC/EN 61800-3 IEC/EN 61800-2 CE CSA-C22.2 No. 14 RCM DNV UL 508C IEC/EN61800-5 UL File No.: E134360 UL IEC/EN 61800-5-1 RoHS, ISO 9001 Certified by UL for use in Canada
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Powering Business Worldwide

<b>PRODUCT CATEGORY</b>	Variable frequency drives
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.

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<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>FITTED WITH:</b>	IGBT inverter OLED display Internal DC link Radio interference suppression filter Additional PCB protection
<b>CLIMATIC PROOFING</b>	< 95 % relative humidity, no condensation, no corrosion, no dripping water
<b>CONNECTION TO SMARTWIRE-DT</b>	No
<b>OPERATING MODE</b>	U/f control Sensorless vector control (SLV)
<b>FRAME SIZE</b>	FR7
<b>ALTITUDE</b>	Above 1000 m with 1 % performance reduction per 100 m Max. 3000 m Max. 1000 m
<b>ENVIRONMENTAL CLASS</b>	3C2, 3S2 (Air quality)
<b>APPLICATION IN DOMESTIC AND COMMERCIAL AREA PERMITTED</b>	No
<b>APPLICATION IN INDUSTRIAL AREA PERMITTED</b>	No
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	50 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-10 °C

<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	70 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-40 °C
<b>ASSIGNED MOTOR CURRENT IM AT 400 V, 50 HZ, 110% OVERLOAD</b>	99 A
<b>ASSIGNED MOTOR CURRENT IM AT 400 V, 50 HZ, 150% OVERLOAD</b>	81 A
<b>MOUNTING POSITION</b>	Vertical
<b>PROTECTION</b>	Finger and back-of-hand proof, Protection against direct contact (BGV A3, VBG4)
<b>RESOLUTION</b>	0.01 Hz (Frequency resolution, setpoint value)
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	0 W
<b>VOLTAGE RATING - MAX</b>	480 V
<b>COMMUNICATION INTERFACE</b>	PROFIBUS-DP DeviceNet, optional Ethernet IP, optional PROFINET, optional EtherCAT, optional LonWorks, optional CANopen®, optional Modbus-RTU, optional BACnet MS/TP, optional Modbus-TCP, optional
<b>CONVERTER TYPE</b>	Other
<b>DEGREE OF PROTECTION</b>	IP21 NEMA Other
<b>ASSIGNED MOTOR CURRENT IM AT 440/480 V, 60 HZ, 110% OVERLOAD</b>	96 A
<b>SYSTEM CONFIGURATION TYPE</b>	AC supply systems with earthed center point
<b>ELECTROMAGNETIC COMPATIBILITY</b>	1st and 2nd environments (according to EN 61800-3)
<b>ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ</b>	60 HP
<b>ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 110% OVERLOAD</b>	75 HP
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	1125 W

<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	0 W
<b>OUTPUT VOLTAGE (U2)</b>	480 V AC, 3-phase 500 V AC, 3-phase 400 V AC, 3-phase
<b>NUMBER OF INPUTS (ANALOG)</b>	2 (parameterizable, 0 - 10 V DC, 0/4 - 20 mA)
<b>NUMBER OF INPUTS (DIGITAL)</b>	6 (parameterizable, max. 30 V DC)
<b>RADIO INTERFERENCE CLASS</b>	C2, C3: depending on the motor cable length, the connected load, and ambient conditions. External radio interference suppression filters (optional) may be necessary.
<b>NUMBER OF OUTPUTS (DIGITAL)</b>	1 (parameterizable, 48 V DC/50 mA)
<b>NUMBER OF RELAY OUTPUTS</b>	2 (parameterizable, N/O, 8 A (24 V DC) / 8 A (250 V AC) / 0,4 A (125 V DC))
<b>RATED CONTROL SUPPLY VOLTAGE</b>	10 V DC (Us, max. 10 mA)
<b>RATED CONTROL VOLTAGE (UC)</b>	24 V DC (external, max. 250 mA)
<b>SUPPLY FREQUENCY</b>	50/60 Hz
<b>MAINS VOLTAGE - MAX</b>	380 V
<b>MAINS VOLTAGE - MIN</b>	380 V
<b>NUMBER OF OUTPUTS (ANALOG)</b>	1
<b>OUTPUT FREQUENCY - MAX</b>	320 Hz
<b>OUTPUT FREQUENCY - MIN</b>	0 Hz
<b>SUITABLE FOR</b>	Branch circuits, (UL/CSA)
<b>SWITCHING FREQUENCY</b>	3.6 kHz, 1 - 10 kHz adjustable, fPWM, Power section, Main circuit
<b>RATED OPERATIONAL VOLTAGE</b>	400 V AC, 3-phase 500 V AC, 3-phase 480 V AC, 3-phase
<b>RATED FREQUENCY - MAX</b>	66 Hz
<b>RATED FREQUENCY - MIN</b>	45 Hz
<b>RATED OPERATIONAL CURRENT (IE) AT 110% OVERLOAD</b>	105 A

